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APPLICATION NO. FIRST NAMED INVENTOR FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. 09/648,613 08/28/2000 Toshiyuki Yamada ASA-919 5525 24956 **EXAMINER** 7590 06/02/2005 MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. EBRAHIMI DEHKORDY, SAEID 1800 DIAGONAL ROAD ART UNIT PAPER NUMBER **SUITE 370** ALEXANDRIA, VA 22314 2626

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		09/648,613	YAMADA ET AL.	
		Examiner	Art Unit	
		Saeid Ebrahimi-dehKordy	2626	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)⊠	Responsive to communication(s) filed on <u>18 November 2004</u> .			
2a)⊠	This action is FINAL . 2b) ☐ This	action is non-final.	·	
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims				
5)□	 4) Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 and 9-12 is/are rejected. 7) Claim(s) 8 and 13 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 			
Application Papers				
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 				
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s)				
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)				
3) Inform	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail Da 5) ロ Notice of Informal Pa 6) 又 Other: シピヤム(atent Application (PTO-152)	

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Response to Amendment

1. Applicant's arguments filed 11/18/04 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim1-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al (U.S. patent 5,745,657) in view of Bhattacharjya et al (U.S. patent 5,963,714)

Regarding claim 1 Barry et al disclose: A color printing apparatus for printing by mixing a plurality of primary colors, comprising: a printer data receiver (please note Fig.1 items 18 and 20 for receiving data, column 3 lines 61-67 and column 4 lines 1-15) and for rasterizing said print data to separately receive con-tone/multi-bits bitmap data and bi-tone/single-bit bitmap data (please note again Fig.1 items 18 and 20 for receiving data, column 3 lines 61-67 and column 4 lines 1-15) a page memory for independently storing therein to both said con-tone/multi-bits bitmap data and said bi-tone/single-bit bitmap data (please note Fig.1 items 18 and 20 where contone and Bi-level data is received by the printer and stored, column 4 lines 1-12 where the contone data is stored in memory 18 and be-level data is stored in the memory 20) a control unit (please note Fig.1 item 12) for executing a control operation in such a manner that said contone/multi-bits bitmap data is converted into con-tone/multi-bits print data, said bi-

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tone/single-bit bitmap data is converted into bi-tone/single-bit print data (please note column 4 lines 12-16) and at least one of said con-tone/multi-bits print data and said bitone/single-bit print data is stored into said page memory in a bitmap format (please note column 4 lines 17-22) and an output control unit for reading at least any one of said con-tone/multi-bits print data and said bi-tone/single-bit print data from said page memory (please note column 4 lines 29-40) and for logically synthesizing said print data with each other to output the synthesized print data to a color printing unit (please note column 4 lines 5-15) However Barry et al don't disclose: for receiving a print instruction of print data issued from an application program and respectively both made up of said print data, from a high-ordered apparatus. On the other hand Bhattacharjya et al disclose: for receiving a print instruction of print data issued from an application program (please note Fig.2 item 12 the item 12 the computer and items 40 and 42 the application program and printer driver respectively for creating and formatting the data coming to the printer, column 5 lines 21-28) and respectively both made up of said print data, from a high-ordered apparatus (please note Figs. 2&3, column 5 lines 21-67 and column 6 lines 5-47 where the different pixels where created by the high order apparatus "the computer 12, application program and the printer driver). Therefore it would have been obvious to a person of ordinary skill in art at the time of the invention to modify Barry et al's invention according to the teaching of Bhattacharjya et al, where Bhattacharjya et al in the same filed of endeavor teach the way the communication data was generated by the application program and through the printer driver transmitted to the printer for the purpose of processing and outputting the data).

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Regarding claim 2 and 10 Barry et al disclose: A color printing apparatus as claimed in claim 1 wherein, said printer data receiver receives a multi-bits rasterize flag for indicating that said con-tone/multi bits bitmap data is rasterized, and also a single-bit rasterize flag for indicating that said bi-tone/single bit bitmap data is rasterized (please note column 4 lines 1-15).

Regarding claim 3 Bhattacharjya et al disclose: A color printing apparatus as claimed in claim 1 wherein, said output control unit includes: a color converting unit for separating said con-tone/mufti-bits bitmap data into a plurality of primary colors and an OR gate circuit for OR-gating bit data of said bi-tone/single-bit bitmap data and said bi tone/single-bit bitmap data every bit position separated from said con-tone/mufti-bits bitmap data by said color converting unit (please note column 6 lines 35-48).

Regarding claim 4 Barry et al disclose: A color printing apparatus as claimed in claim 3 wherein, said output control unit includes, an inverting circuit for inverting said bi tone/single-bit bitmap data every bit; and an AND gate circuit for AND-gating said inverted bitmap data and said con-tone/mufti-bits bitmap data every bit position (please note column 13 lines 49-59).

Regarding claim 5 Barry et al disclose: A color printing apparatus as claimed in claim 3 wherein, when said con-tone/mufti-bits print data is stored into said page memory said control unit sets the bit position of the bi-tone/single-bit print data within said con-tone/multi-bits print data to non-print data in response to said single-bit rasterize flag (please note column 4 lines 1-16).

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Regarding claim 6 Barry et al disclose: A color printing apparatus as claimed in claim 1 wherein, said control unit stores both said bi tone/single-bit print data and said con-tone/multi-bits print data into plural sub-divided areas of said page memory in the unit of a block based upon address information designated to said print data and sets said area which is not designated by said address information to a non-print area (please note column 17-24).

Regarding claim 7 Bhattacharjya et al disclose: A color printing apparatus as claimed in claim 1 wherein, said output control unit judges as to whether or not both said con-tone/multi-bits print data and said bi-tone/single-bit print data stored in said page memory are required to be printed out in response to both said single-bit rasterize flag and said multi-bits rasterize flag and said output control unit outputs only said print data to the color printing unit (please note column 6 lines 13-23).

Regarding claim 11 Barry et al disclose: A printing system as claimed in claim 9 wherein, said color printing apparatus judges as to whether or not both said contone/multi-bits print data and said bi-tone/single-bit print data which are stored into said page memory in a bitmap format are required to be printed out to thereby print out at least one of said con-tone/multi-bits print data and said bi-tone/single-bit print data (please note column 3 lines 61-67 and column 4 lines 1-16).

Regarding claim 12 Barry et al disclose: A printing system as claimed in claim 11 wherein, said color printing apparatus judges as to whether or not both said contone/multi-bits print data and said bi-tone/single-bit data, which are stored into said page

memory in a bitmap format are required to be printed out based upon said single-bits rasterize flag and said multi-bits rasterize flag (please note column 4 lines 17-40).

Allowable Subject Matter

4. Claim 8 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 8 and 13 are disclose designating resolution and enlarging circuit for enlarging said con-tone/multi-bits bitmap data.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

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➤ Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Saeid Ebrahimi-Dehkordy* whose telephone number is (571) 272-7462.

The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams, can be reached at (571) 272-7471.

Any response to this action should be mailed to:

Assistant Commissioner for Patents Washington, D.C. 20231

Or faxed to:

(703) 872-9306, or (703) 308-9052 (for *formal* communications; please mark

"EXPEDITED PROCEDURE")

Or:

(703) 306-5406 (for *informal* or *draft* communications, please label "PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Knox building on 501 Dulany Street, Alexandria, VA.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 305-4750.

Saeid Ebrahimi-Dehkordy

Patent Examiner Group Art Unit 2626

May 28, 2005/

KIMBERLY WILLIAMS